

# MR5000L - MR5010L

**PRV : 50 - 1000 Volts**  
**Io : 50 Amperes**

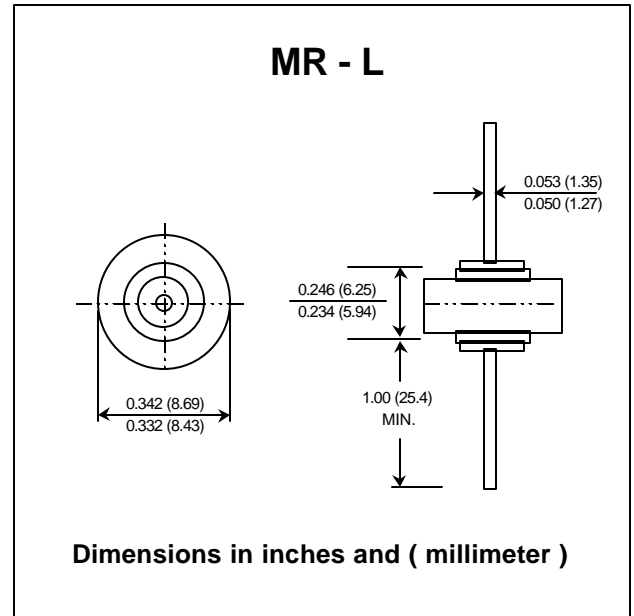
## FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop

## MECHANICAL DATA :

- \* Case : Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Cathode polarity band
- \* Mounting position : Any
- \* Weight : 2.69 grams

# AUTOMOTIVE RECTIFIER DIODES



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

RATING	SYMBOL	MR	MR	MR	MR	MR	MR	MR	UNIT
		5000L	5001L	5002L	5004L	5006L	5008L	5010L	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Average Rectified Forward Current $T_c = 150^{\circ}C$	$I_{F(AV)}$	50							Amps.
Peak Forward Surge Current Single half sine wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	500							Amps.
Maximum Forward Voltage at $I_F = 50$ Amps.	$V_F$	1.1							Volts
Maximum DC Reverse Current $T_a = 25^{\circ}C$ at rated DC Blocking Voltage $T_a = 100^{\circ}C$	$I_R$	5.0							$\mu A$
	$I_{R(H)}$	1.0							mA
Thermal Resistance (Note 1)	$R_{\theta JC}$	0.8							$^{\circ}C/W$
Junction Temperature Range	$T_J$	- 65 to + 175							$^{\circ}C$
Storage Temperature Range	$T_{STG}$	- 65 to + 175							$^{\circ}C$

Note : (1) Thermal resistance from junction to case.

## RATING AND CHARACTERISTIC CURVES ( MR5000L - MR5010L )

